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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Signature Carla R. Aliberti

Typed or printed name Carla R. Aliberti

Application No.

Applicant

Filed

Title

TC/A.U.

Examiner

Docket No.

Assignee

Customer No.

Confirmation No.



09/927,103

Priestley

8/10/2001

LINK MANAGEMENT USING DOCUMENT STRUCTURES

2175

Abel-Jalil, Neveen

CA920010055US1

International Business Machines Corporation

24852

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Technology Center 2100

MAILSTOP APPEAL BRIEF - PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

SUBMISSION OF APPELLANT'S BRIEF ON APPEAL

Sir:

In accordance with 37 C.F.R. § 1.192, Appellant's agent hereby submits a Brief of Appellants, in triplicate, in response to the final rejection in the above-identified application as set forth in the Office Action dated October 23, 2003.

The Commissioner is hereby authorized to charge the statutory Appeal Brief fee of \$330.00, and any additional fees that may be required or credit any overpayments, to Deposit Account 09-0460. A duplicate copy of this sheet is enclosed.

Respectfully submitted

Michael Priestley

By: Gregory M. Plow

Gregory M. Plow, Reg. No. 43,005

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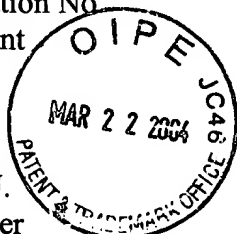
Date: March 16, 2004

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. 09/927,103
Applicant Michael Priestley
Filed August 10, 2001
Title Link Management Using Document Structures

TC/A.U. 2175
Examiner Abel-Jalil, Neveen
Docket No. CA920010055US1
Assignee International Business Machines Corporation
Customer No. 24852
Confirmation No. 3897



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Technology Center 2100

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPELLANT'S BRIEF ON APPEAL UNDER 37 C.F.R. § 1.192

Dear Sir:

In accordance with the provisions of 37 C.F.R. § 1.192, Appellant's Agent submits a Brief of Appellant, in triplicate, in response to the final rejection in the above identified application as set forth in the Office Action dated October 23, 2003.

Please charge the amount of \$330.00 as set forth under 37 C.F.R. § 1.17(c) to cover the required fee for filing this brief to Deposit Account No. 09-0460 of IBM Corporation, the assignee of the present application. Also, please charge any additional fees or credit any overpayments to Deposit Account No. 09-0460 of IBM Corporation.

Appellant's Notice of Appeal was filed on January 19, 2004. Therefore, the present Appeal Brief is timely filed.

03/24/2004 AHONDAF1 00000065 090460 09927103

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I. REAL PARTY IN INTEREST

The real party in interest is INTERNATIONAL BUSINESS MACHINES CORPORATION by virtue of an assignment executed by Michael Priestley (Appellant, hereafter), on November 12, 2001.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences for the above-referenced patent application.

III. STATUS OF CLAIMS

Claims 1 – 21 (see appendix) are currently on appeal from the finally rejected claims of the final office action dated October 23, 2003.

Claims 1 – 21 were finally rejected under 35 U.S.C. §103 (a) as being unpatentable over Blumer et al., U.S. Patent No. 6,189,019 (Blumer) in view of Astiz et al., U.S. Patent No. 6,035,330 (Astiz).

IV. STATUS OF AMENDMENTS

The Amendments made responsive to the office action of 05/08/2003 have been entered in the file wrapper. No amendments have been made subsequent to the final office action.

V. SUMMARY OF THE INVENTION

Appellant's invention is directed to a link management system for creating links among units of information based on a list of identifiers arranged in a predetermined relative hierarchical order (page 1, lines 4-5 and page 7, lines 8-12 together with Fig. 3, reference numerals 302-316.) Exemplary units of information include web pages and help files (page 1, lines 11-16.) Web pages, or help files, are frequently created independently of one another during initial development, wherein each unit of information (e.g. web page) may be directed to a particular topic or theme; and

then, after the web pages are created, the information developer determines how these pages should be interrelated and, accordingly, linked among one another to form a web site (page 2, lines 5-9 together with Fig. 1, reference numerals 102A, 102B, 102C and 102D.)

Once the relationships are determined by the information developer, the determination is specified in the form of a hierarchical list of information unit identifiers. This predetermined hierarchical list is then provided to direct the link management system to create or modify the links among units of information in accordance with the information developer's specification (page 9, lines 18-24 together with Figure 4, reference numerals 404 and 406). The prior art provides inadequate methods for inter-linking units of information, wherein time is wasted on individually updating each unit of information or on learning new programming languages to explicitly identify inter-linking relationships (page 4, lines 14-19.)

VI. ISSUE PRESENTED FOR REVIEW

Whether claims 1-21 are obvious under 35 U.S.C. §103(a) over Blumer et al., U.S. Patent No. 6,189,019 (Blumer) in view of Astiz et al., U.S. Patent No. 6,035,330 (Astiz). For at least the reasons set forth below, appellant respectfully submits that pending claims 1-21 are patentable over the combination.

VII. GROUPING OF CLAIMS

The rejected claims all stand or fall together.

VIII. ARGUMENTS

Appellant respectfully requests the Board to reverse the Examiner's final rejection of the pending claims 1-21 for at least the following reasons, which are set forth after a brief description of the art.

A. The Astiz Reference

Astiz describes an Internet navigational mapping system wherein a graphical representation of the structure of an existing web site permits a user to navigate through the web site efficiently using the graphical representation. The navigational map is generated by a mapping mechanism which parses the various objects contained in the web site into an organized hierarchical form of web page identifiers.

Astiz uses an analogy that is helpful in understanding the nature of the Astiz invention, found in column 5, lines 39 – 57, wherein Astiz states:

Therefore, the Web navigational map in accordance with the present invention is much like a road map. Instead of having to drive from Washington, D.C. to New York over various interstates, highways, and secondary roads following only signs along those roadways which indicate that you are heading towards New York, the map allows the user to view the map (without even getting in his car) to determine beforehand the most efficient and direct road route to New York . . . Accordingly, the present invention allows the user to visualize paths through one or more web sites to various destinations without having to actually follow/explore those paths to know that they exist and where they lead . . . The web navigational mapping system has two central components: a map maker and a map viewer.

Continuing to use this analogy, it is important to understand that Astiz pertains to building a roadmap for a pre-existing network of roads for the benefit of a traveler. Astiz does not build the roads, but rather Astiz maps the already existing roads.

B. The Blumer Reference

Blumer teaches a navigational aid that represents a website as either an “outline view” or as a “link map view.” The outline view represents the previously existing linked web pages in a hierarchical list form. The link map view represents this same information in the form of icons representing web pages with arrows representing the links between the web pages. The fact that the website is pre-existing is made clear at Column 11, lines 19 –21, where Blumer states:

The present invention operates on linked documents that are herein referred to as a “web”. A map of linked documents forming a web 301 is shown in FIG. 3.

Borrowing again from the helpful roadmap analogy developed by Astiz, Blumer is creating a roadmap to assist a user in navigating a previously existing network of roads. Blumer is not building the roads, but rather is mapping the roads that previously existed.

C. The Appellant's Claimed Invention Is Patentable Over The References

Appellant's invention, borrowing again from the Astiz roadmap analogy, is directed to “road building.” The map building that may follow once the roads are built, as a navigational aid to the traveler, is left for others to teach. Such map building and navigational aides are the focus of Astiz and Blumer.

The Examiner asserts that the abstract of Blumer, and column 19, lines 15-38 of Blumer, together show Appellant's independent claim preamble, which states in part, “creating and managing links amongst units of information based on a list of identifiers arranged in an hierarchical order wherein each identifier identifies an associated unit of information”. Appellant's agent disagrees, for at least the reasons set forth below.

The cited reference teaches a method for “*representing linked document connectivity*.”

There is no indication in the Examiner’s reference that Blumer is using a list of identifiers arranged in an hierarchical order to drive the linking of documents. The hierarchical list taught in Blumer is used in an opposite way from Appellant’s invention. That is, Blumer teaches that the already established linked document connectivity drives the creation of the hierarchical list of identifiers, whereas Appellant discloses that a hierarchical list of identifiers drives the creation of the document links (i.e. linked document connectivity.)

Blumer, column 19, lines 15-38 (Blummer’s Claim 22,) states in part “said computer program enabling a visual representation of relationships between elements that are linked together by hypertext links so as to form a web . . .”, further confirms that Blumer is only representing previously established hypertext linking between existing documents at the time of the visual representation: Claim 22 is specifically directed to a visual representation of the elements of a web previously linked together by hypertext links.

Appellant discloses the transformation of individual web elements (e.g. web pages or help files) into a linked structure by directing, utilizing a hierarchical list of identifiers, a link management system to create the various links among the web elements. This transformation of web pages into a web is not disclosed in the reference and, accordingly, the Examiner has failed to establish a basis for asserting that Appellant’s independent claim preamble is found in Blumer.

The Examiner asserts that Blumer teaches most of the elements of Appellant’s independent claims. However, the Examiner admits that “Blumer does not teach wherein said list of identifiers has a predetermined relative hierarchical order to direct said link management system in the creation of said links.” Nonetheless, the Examiner further asserts that Astiz teaches “wherein said list of identifiers has a predetermined relative hierarchical order to direct said link management system in the creation of said links . . .” Thus, the Examiner states “It would have been obvious to

one of ordinary skill in the art at the time of the invention was made to have modified Blumer by the teaching of Astiz to include wherein said list of identifiers has a predetermined relative hierarchical order to direct said link management system in the creation of said links because creating a hierarchical map for inserting and storing existing and new links provides for efficient and faster data access and navigation.”

More specifically, the Examiner asserts that Blumer discloses (at column 11, lines 54-67 through column 12, lines 1-18; and column 14, lines 55-67 through column 15, lines 1-24) Appellant’s independent claim 15 limitation of “code for instructing said computer system to link a unit of information to at least one other unit of information based on the relative hierarchical order of identifiers . . .” Appellant’s agent disagrees for at least the reasons set forth below.

Summarizing column 11, lines 54-67 through column 12, lines 1-18, Blumer discloses the creation of internal data structures used to facilitate the generation of navigational maps for web sites. These data structures comprise a *master document list* (a dictionary structure), which is also referred to as a main dictionary, an *index of links* (a dictionary structure), a *document structure* (a list structure), and a *secondary dictionary* (a dictionary structure). Lists and dictionaries are frequently referred to in the art, including Blumer, as “data structures”. Blumer, at column 11, lines 34-37, states “There are three main document and link *data structures* that are used in this invention: (1) a master document list . . . (2) an index of links . . . (3) a list of orphan pages (not shown).” These data structures are internal to the computer program practicing Blumer and are created responsive to the pre-existing documents together with their pre-existing hypertext links.

Therefore, Blumer assumes the existence of previously linked “units of information” (i.e. documents that have hypertext links to other documents or document objects) from which internal data structures are generated in support of Blumer’s mapping and navigational system. The previously existing documents and document objects together with their previously established

hypertext links are the source information from which Blumer derives the disclosed data structures. Blumer does not link documents or document objects by driving off of a relative hierarchical list of identifiers. To the contrary, Blumer assumes that the documents and documents objects are already linked and it is this linkage that drives the creation of the internal data structures disclosed by Blumer.

The Examiner may be confusing the internal data structures disclosed in Blumer with Appellant's "units of information". Appellant's agent asserts that internal data structures (e.g. dictionaries, arrays, lists, tables and the like) commonly used in software, and more particularly software taught by Blumer, are not "*units of information*" as defined within Appellant's specification. It is the "documents" and "document objects" disclosed in Blumer that are the corresponding elements with respect to Appellant's "unit of information". This assertion is made clear with the facts set forth below.

Page 1 of Appellant's specification, under the heading Technical Field of the Invention, states that "This invention relates to managing links and more specifically to inter-linking a multitude of *units of information* such as web pages or help files and the like." Further examples of units of information are provided on page 1, lines 11-16 of Appellant's specification, which states "An example of units of information is a collection of web pages for a corporate web site wherein the web pages are inter-linked by URLs (Uniform Resource Locators) links. There are many well-known application programs for generating and linking web pages such as Dreamweaver™ available from Macromedia of California, U.S.A. Another example of units of information is a collection of help files that are inter-linked by URL links." Also see page 2, lines 5-8 which recites "It will be appreciated that the linking of the units of information is set up to achieve the purposes of the information developer. When the information developer develops a new unit of source information 102D, the developer must decide which links to add, delete or modify . . ."

Accordingly, the term “units of information” within the context of Appellant’s specification refers to documents, pages or files that may have interrelationships in accordance with the purposes of an information developer. The Internal data structures disclosed by Blumer are not “units of information” as defined by Appellant’s specification.

The Examiner also cited Blumer, column 14, lines 55-67 through column 15, lines 1-24, as providing additional support for asserting that Blumer discloses “code for instructing said computer system to link a unit of information to at least one other unit of information based on the relative hierarchical order of identifiers . . .”

The above-cited portion of Blumer is primarily directed to the generation of an *outline view* form of a navigational map for a web site. Blumer discloses exemplary criteria for excluding a document from the outline view, including not displaying image documents, not displaying self-references, and not displaying duplicate documents as a means for simplifying the outline view without detracting from its value. If the document survives these exclusionary criteria, then the associated document structure is retrieved from a master document list and an item representative of that document is inserted into the outline tree.

Blumer further discloses that a document structure (an internal data structure) may also comprise an outline view object. When a document is added to the outline tree, the outline view object contained in the associated document structure is updated with a reference to its outline tree item. Blumer teaches that enhancing the document structure with an outline view object has two purposes. The first purpose is to make it possible to quickly find an associated outline tree item given a document structure. The second purpose is to make it possible to determine if a given document structure is already represented in the outline view, which facilitates detecting a recursive tree.

In summary, Blumer teaches utilizing internal data structures, generated from existing documents and existing URL links contained therein, to form a hierarchical view (an outline tree in Blumer) of these documents. Blumer does not link documents based on the relative hierarchical order of identifiers, since the outline tree simply represents previously linked documents. Blumer assumes that the documents and their URL links already exist as a prerequisite to forming the corresponding representative outline tree.

Blumer utilizes linked documents, which are the Appellant's units of information, as the source from which the hierarchical map of the documents is generated. In contrast to Blumer, Appellant's invention, and in accordance with the independent claims, utilizes a hierarchical arrangement of identifiers to drive the creation of links between documents. Therefore, Blumer does not teach or suggest "code for instructing said computer system to link a unit of information to at least one other unit of information based on the relative hierarchical order of identifiers . . ."

The Examiner admits that Blumer "does not teach wherein said list of identifiers has a predetermined relative hierarchical order to direct said link management system in the creation of said links." However, the Examiner asserts that Astiz teaches "wherein said list of identifiers has a predetermined relative hierarchical order to direct said link management system in the creation of said links" and further concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Blumer by the teaching of Astiz to include this limitation. The Examiner references Astiz column 11, lines 4-67, reference numeral 58 of Figure 9 and Figure 6, in support of this assertion. These references fail to support the Examiner's assertion for at least the reasons set forth below.

Astiz, column 11, lines 4-67 together with Figure 9 and Figure 6 disclose a process for generating and viewing Internet navigational map(s). Astiz provides background information pertaining to "viewers" and how they communicate with an Internet browser utilizing the Multi-

purpose Internet Mail Extension type (MIME). Astiz teaches that a map viewer MIME type is recognized by the browser whenever a user requests display of a site map and, accordingly, the appropriate map viewer defined for that particular MIME type is invoked to display the map.

Astiz, further adds additional explanatory text for Figure 9 wherein the logic for generating and viewing Internet navigational maps is illustrated in flow chart form. When a user selects a website for viewing/exploring, a determination is made whether this web site has already been mapped. If it has been mapped, the map is retrieved from a local map database or from a server. If the web site has not been mapped, and the user desires a map, then the browser invokes the map maker routine to generate a map for the web site and to store the map in a map database. The map is then displayed using the map viewer. Astiz further discloses that the map may be used for navigating the web site by, for example, double clicking on a page entry within the map. Additionally, the user may view one or more existing navigational maps without connecting to the Internet. Figure 6, cited by the Examiner, illustrates a navigational map with a tree like hierarchical structure.

The above summary of the cited reference is void of any instruction pertaining to directing a link management system to create links based on a list of identifiers with a predetermined relative hierarchical order. This is not surprising, since the abstract from Astiz recites in part “a graphical representation of the structure of the web site . . . A web site mapping mechanism is provided which parses the various objects contained in the web site and organizes those objects and links between the objects into an organized, and preferably, hierarchical, fashion.” Accordingly, Astiz teaches the creation of a hierarchical navigational map by analyzing previously existing web site objects together with their previously existing links. Since the web site objects disclosed in this abstract are analogous to Appellant’s “units of information,” it follows that the hierarchical navigational map does not direct a component or system to create links between units of information, but rather the

pre-existing web site objects together with their pre-existing web site links direct the mapping mechanism to create the hierarchical navigational map. The hierarchical navigational map taught by Astiz is reflective of, and derived from, the previously existing web site objects and their previously existing links. Accordingly, the combination of Blumer and Astiz, obvious or otherwise, is simply not relevant with respect to anticipating this key element of Appellant's independent claim.

In the advisory action dated 12/15/2003, the Examiner responds to Appellant's previously made arguments where Appellant's agent stated "nowhere in Astiz, or Blumer, is there any teaching or suggestion to create links in web pages in accordance with a hierarchical list of identifiers". The Examiner points to Blumer column 12, lines 30-63 and Astiz column 5, lines 15-61 as a basis for rejecting Appellant's argument as not persuasive. Appellant's agent respectfully disagrees with the Examiner's assertion for at least the reasons set forth below.

In summary, Blumer, in column 12, lines 30-63, teaches how the internal data structures accommodate "orphan pages". Blumer defines orphan pages as those pages that are not accessible by following links from the homepage of the web. Blumer further informs the reader within the cited reference that various useful classes are available within the Windows™ development environment to facilitate the implementation of the Blumer internal data structures. Finally, the cited reference indicates that while the Blumer invention can be implemented in different applications, it is to be assumed for the present discussion that the invention is incorporated into a web document authoring tool within a client server environment.

Nowhere in the above teaching is there a disclosure or suggestion of creating links in web pages in accordance with a hierarchical list of identifiers. Accordingly, the validity of Appellant's previously submitted assertion is neither refuted nor diminished by the Examiner's Blumer reference.

Because it is indicated that the Blumer invention may be incorporated into a “web document authoring tool”, the Examiner may have jumped to conclusion that, since web authoring tools do indeed create links in units of information, that this functionality must also be present in Blumer’s invention. This, however, is not the case. The rationale for including Blumer into a web authoring tool is found in column 8, lines 47-67 through column 9, lines 1-5 wherein Blumer explains the need, during web authoring, for an information developer to navigate to pages that have previously been linked by the web authoring process. In this environment, navigation may be particularly problematic in that the links may be established, but not active. Blumer addresses these navigational problems within a web authoring tool and thereby provides the motivation for incorporating the teachings of Blumer into a web authoring tool; however, Blumer does not teach or suggest the creation of links in web pages, as this process is relegated to the web authoring tool.

The Examiner also cites Astiz column 5, lines 15-61, to refute Appellant’s previously submitted assertion that “nowhere in Astiz, or Blumer, is there any teaching or suggestion to create links in web pages in accordance with a hierarchical list of identifiers”. This reference is also ineffectual in diminishing the validity of Appellant’s previously submitted assertion, for at least the reasons set forth below.

Summarizing the above reference, Astiz teaches a number of objects to be accomplished. One object is the utilization of symbols within a map to communicate useful information about a web site. Another object is to provide a mapping mechanism to parse the objects and object links comprising the web site into a hierarchical map structure. Astiz further explains that the Internet navigational mapping system provides, in a condensed graphic image, clues to the content of one or more web sites and assists the user in navigating the one or more web sites. An analogy is provided wherein the Astiz invention is analogous to a roadmap and the derived benefits are analogous to a driver with a roadmap versus a driver without a roadmap. Astiz further discloses that the web

navigational mapping system has two central components: a map maker and a map viewer with the map maker generating a navigational map of the objects and links that are present at a web site.

It is apparent from the above summary that Astiz does not teach or suggest creating links in web pages in accordance with a hierarchical list of identifiers. Astiz builds maps, wherein existing web pages and their already established links drive the map making process. Accordingly, the validity of Appellant's previously submitted assertion is neither refuted nor diminished in any way by the Examiner's Astiz reference.

In the advisory action dated 12/15/2003, the Examiner rejects Appellant's previously submitted argument stating "that neither reference has teachings or suggestion to create links in web pages from a hierarchical list, or from any other form of navigational map". Pointing to Astiz column 7, lines 34-67, and Astiz column 8, lines 1-5 the Examiner concludes "the map maker create website from the hierarchical list of identifiers."

Astiz, in column 7, lines 34-67 through column 8, lines 1-5, is primarily directed to making and viewing maps of one or more web sites wherein the map, in a preferred embodiment, is configured as a hierarchical, tree-type data structure. Astiz, at column 8, lines 1-3 recite "... both the map maker 14 and map viewer 18 are used at a single work station/PC to allow a user to both create and view *web site maps* as desired ..."

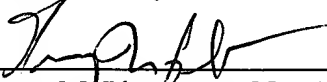
It is clear from the above that it is "web site maps" that are being created, not web sites. Creating a "web site map" is an entirely different process from creating a "web site," and there is no rational basis for making these terms interchangeable. Accordingly, Appellant's agent asserts that the Examiner's conclusion "wherein the map maker create website from the hierarchical list of identifiers" is erroneous and unfounded with respect to the cited reference.

D. CONCLUSION

In view of the above arguments, Appellant's Agent respectfully solicits a decision by the Board of Patent Appeals and Interferences reversing the rejection of the appealed claims under 35 U.S.C. §103(a) and to find each of the claims allowable.

Respectfully submitted,

Michael Priestley

By: 

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Date: March 16, 2004

APPENDIX

CLAIMS 1-21 ON APPEAL:

1. A link management system for creating links amongst units of information based on a list of identifiers arranged in an hierarchical order wherein each identifier identifies an associated unit of information, said system comprising:

means for storing said list of identifiers, wherein said list of identifiers has a predetermined relative hierarchical order to direct said link management system in the creation of said links;

means for examining said list of identifiers to determine the hierarchical order of said identifiers within said list of identifiers;

means for linking a unit of information to at least one other unit of information based on the relative hierarchical order of identifiers including:

an identifier identifying said unit of information; and

another identifier identifying said at least one other unit of information.

2. The link management system of claim 1 wherein:

said units of information are units of target information;

each said identifier of said list of identifiers is adapted to identify source information content of a unit of source information;

the system further comprises:

means for generating said units of target information;

means for examining said list of identifiers to identify said source information content assigned to a unit of target information; and

means for inserting said source information content into a unit of target information based on the identifier of said unit of target information identifying said source information content.

3. The link management system of claim 2 wherein a plurality of source information content is assigned to a unit of target information.

4. The link management system of claim 1 wherein:

said units of information are units of target information;

each said identifier of said list of identifiers is adapted to identify source information content of a unit of source information assigned to a unit of target information;

said list of identifiers further comprises:

a first subset of identifiers for identifying said units of target information to be generated by said system, said first subset hierarchically ordered to indicate preferred linking of said units of target information;

a second subset of identifiers for identifying said source information content to be inserted into said units of target information identified by said first subset of identifiers;

said means for linking is adapted to link a unit of target information to at least one other unit of target information based on the relative hierarchical order of identifiers including:

an identifier of said first subset for identifying said unit of target information;

at least one other identifier of said first subset for identifying said at least one other unit of target information; and

said system further comprises:

means for generating said units of target information; and

means for inserting at least one source information content into a unit of target information based on an identifier of said second subset identifying said at least one source information content.

5. The link management system of claim 4 wherein said list of identifiers further includes a third subset of identifiers for identifying links for inter-linking units of target information.

6. The link management system of claim 5 wherein the means for linking is adapted to inserting URL links.

7. The link management system of claims 3 or 5 wherein said identifiers of said list are data tags of a markup language.

8. A method performed on a computer system operationally coupled to computer readable memory for storing a list of identifiers, and said method for creating and managing links amongst units of information based on said list of identifiers arranged in an hierarchical order wherein each identifier identifies an associated unit of information, said method comprising the steps of:

storing said list of identifiers, wherein said list of identifiers has a predetermined relative hierarchical order to direct said link management system in the creation of said links;

examining said list of identifiers to determine the hierarchical order of said identifiers within said list of identifiers;

linking a unit of information to at least one other unit of information based on the relative hierarchical order of identifiers including:

an identifier identifying said unit of information; and

another identifier identifying said at least one other unit of information.

9. The method of claim 8 wherein:

said units of information are units of target information;

each said identifier of said list of identifiers is adapted to identify source information content of a unit of source information;

the method further comprising the steps of:

generating said units of target information;

examining said list of identifiers to identify said source information content assigned to a unit of target information; and

inserting said source information content into a unit of target information based on the identifier of said unit of target information identifying said source information content.

10. The method of claim 9 wherein a plurality of source information content is assigned to a unit of target information.

11. The method of claim 8 wherein:

said units of information are units of target information;

each said identifier of said list of identifiers is adapted to identify source information content of a unit of source information assigned to a unit of target information;

said list of identifiers further comprises:

a first subset of identifiers for identifying said units of target information to be generated by said system, said first subset hierarchically ordered to indicate preferred linking of said units of target information;

a second subset of identifiers for identifying said source information content to be inserted into said units of target information being identified by said first subset of identifiers;

said step of linking is adapted to link a unit of target information to at least one other unit of target information based on the relative hierarchical order of identifiers including:

an identifier of said first subset for identifying said unit of target information;

at least one other identifier of said first subset for identifying said at least one other unit of target information; and

said method further comprising the steps of:

generating said units of target information; and

inserting at least one source information content into a unit of target information based on an identifier of said second subset identifying said at least one source information content.

12. The method of claim 11 wherein said list of identifiers further includes a third subset of identifiers for identifying links for inter-linking units of target information.

13. The method of claim 12 wherein the step of linking is adapted to inserting URL links.

14. The method of claims 10 or 12 wherein said identifiers of said list are data tags of a markup language.

15. A computer program product for use in a computer system operatively coupled to a computer readable memory, the computer program product including a computer-readable data storage medium tangibly embodying computer readable program code for directing said computer to create and manage links amongst units of information based on a list of identifiers arranged in an hierarchical order wherein each identifier identifies an associated unit of information, said computer program product comprising:

code for instructing said computer system to store said list of identifiers, wherein said list of identifiers has a predetermined relative hierarchical order to direct said link management system in the creation of said links;

code for instructing said computer system to examine said list of identifiers to determine the hierarchical order of said identifiers within said list of identifiers;

code for instructing said computer system to link a unit of information to at least one other unit of information based on the relative hierarchical order of identifiers including:

an identifier identifying said unit of information; and

another identifier identifying said at least one other unit of information.

16. The computer program product of claim 15 wherein:

said units of information are units of target information;

each said identifier of said list of identifiers is adapted to identify source information content of a unit of source information;

said computer program product further comprises:

code for instructing said computer system to generate said units of target information;

code for instructing said computer system to examine said list of identifiers to identify said source information content assigned to a unit of target information; and

code for instructing said computer system to insert said source information content into a unit of target information based on the identifier of said unit of target information identifying said source information content.

17. The computer program product of claim 16 wherein a plurality of source information content is assigned to at least one unit of target information.

18. The computer program product of claim 15 wherein:

said units of information are units of target information;

each said identifier of said list of identifiers is adapted to identify source information content of a unit of source information assigned to a unit of target information;

said list of identifiers further comprises:

a first subset of identifiers for identifying said units of target information to be generated by said system, said first subset hierarchically ordered to indicate preferred linking of said units of target information;

a second subset of identifiers for identifying said source information content to be inserted into said units of target information being identified by said first subset of identifiers;

said code for instructing said computer system to link is adapted to link a unit of target information to at least one other unit of target information based on the relative hierarchical order of identifiers including:

an identifier of said first subset for identifying said unit of target information;

at least one other identifier of said first subset for identifying said at least one other unit of target information; and

said computer program product further comprises:

code for instructing said computer system to generate said units of target information; and

code for instructing said computer system to insert at least one source information content into a unit of target information based on an identifier of said second subset identifying said at least one source information content.

19. The computer program product of claim 18 wherein said list of identifiers further includes a third subset of identifiers for identifying links for inter-linking units of target information.

20. The computer program product of claim 19 wherein said code for instructing said computer system to link is adapted to inserting URL links.

21. The computer program product of claims 17 or 19 wherein said identifiers of said list are data tags of a markup language